



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : C12N 15/31, 15/74, C07K 14/315, A61K 39/09		A1	(11) International Publication Number: WO 96/40930 (43) International Publication Date: 19 December 1996 (19.12.96)
(21) International Application Number: PCT/US96/10252		(74) Agent: BRUESS, Steven, C.; Merchant, Gould, Smith, Edell, Welter & Schmidt, P.A., 3100 Norwest Center, 90 South Seventh Street, Minneapolis, MN 55402 (US).	
(22) International Filing Date: 7 June 1996 (07.06.96)			
(30) Priority Data: 08/480,261 7 June 1995 (07.06.95)		US	(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).
(60) Parent Application or Grant (63) Related by Continuation US Filed on 08/480,261 (CIP) 7 June 1995 (07.06.95)			
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(54) Title: MUTANTS OF STREPTOCOCCAL TOXIN A AND METHODS OF USE

(57) Abstract

This invention is directed to mutant SPE-A toxins or fragments thereof, vaccine and pharmaceutical compositions, and methods of using the vaccine and pharmaceutical compositions. The preferred SPE-A toxin has at least one amino acid change and is substantially non-lethal compared with the wild type SPE-A toxin. The mutant SPE-A toxins can form vaccine compositions useful to protect animals against the biological activities of wild type SPE-A toxin.